

Columbia, the industry is prosecuted to some extent, also in Picton County, Ont.; but the proprietor of one of the factories told me that the market for canned apples was rather limited.

Mr. Brodie—About the Yellow Transparent, I am sorry I cannot corroborate what Prof. Craig has said as regards the value of that apple in the Montreal markets. The colour does not take, and it comes into competition with the California fruit.

Prof. Shutt then delivered the following address on

PLANT CONSTITUENTS.

These fundamental materials are divided into two large groups as will be noticed by the accompanying chart, the organic elements and the inorganic or mineral elements. The organic elements are also classified as the air derived, and the inorganic elements as the soil derived elements.

PLANT CONSTITUENTS:

The Organic Elements	{ Carbon } { Oxygen } { Hydrogen } { Nitrogen }	Carbonic Acid Water	{ Starch } { Sugar } { Fibre } { Oil }	A L B U M I N O I D S	AIR-DERIVED ELEMENTS
The Inorganic Elements	{ Calcium } { Magnesium } { Potassium } { Sodium } { Iron } { Manganese }	Ph'sphor's Silicon Sulphur Chlorine			SOIL-DERIVED ELEMENTS

The organic elements, carbon, etc., are not to be found as such in the materials of the plant, but are there combined with one another, forming well-known compounds. These have been formed from the food the plants have absorbed, just as the bone, flesh and blood of which we are made up has been derived from the food we have eaten. They are not absolutely, but they are essentially the same as the food. The food has been converted by the life functions of digestion and assimilation into muscles, bone and so forth. Remember this, then, that just as we are constituted of the food we eat, so are plants made up of the elements of food they take in. These elements are built up, by the life functions of the plants into various substances. What are these substances? These organic elements, combined in various proportions, become protein or albuminoids, of starch, sugar, fibre and oil. The Albuminoids are so called because of their chemical resemblance to the white of an egg, a substance