Notes on Indigestible Structures in Articles of a Vegetable Diet.

By John S. Wright.

Many articles of a vegetable diet, especially those which are consumed in a crude or raw state, contain tissue elements which pass through the alimentary canal without losing their identity. Examinations of fecal matter show that all of the tissue elements from parenchyma to sclerenchyma may under various conditions pass through the entire digestive tract almost unaltered so far as general character is concerned. In some diseases of children and in disorders of the digestive organs it is necessary to make fecal examinations to complete the diagnosis. In several such cases which have come to my knowledge the presence of these vegetable cells has given rise to considerable speculation, particularly where the physicians were not familiar with plant histology.

In one case the presence of what afterwards proved to be parts of orange pulp was very perplexing; in another the attending physician was concerned over the repeated occurrence in the stools of shredded or fibrous matter. As the patient, a man, was being treated for dyspepsia, he was of the opinion that these fibres resulted from the epithelial layer of the intestines. On submitting them for examination, they proved to consist wholly of tracheary tissue, mostly pitted vessels. In his examination, the physician had taken each pit to represent an animal cell. On inquiry it was learned that the patient, during the time his feces contained this material had eaten freely of small, fibrous sweet potatoes, which were likely the source of these pitted vessels. The above and other cases have suggested to me that further histological studies of the common articles of our vegetable diet would prove of practical value from both the medical and botanical standpoint.

The Action of Mercury and Amalgams on Aluminum.

By Geo. W. Benton.

Some Field Experiments with Formalin. By Mason B. Thomas.

At the last December meeting of the Academy we made a preliminary report on the effects of formalin on germinating seeds. As stated at that time, the experiments were conducted in the greenhouse, where all of the