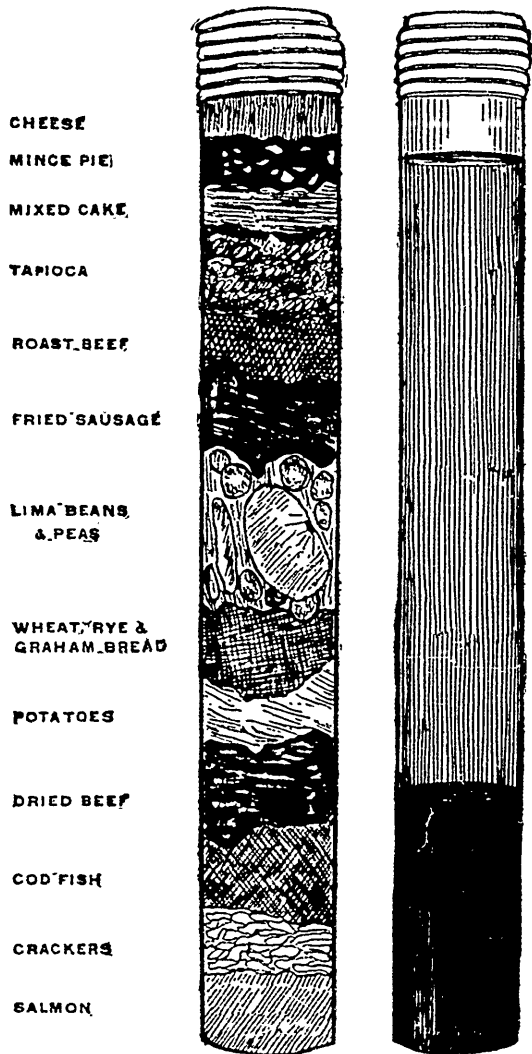


antiseptic in its action, and prevents abnormal fermentative processes from taking place in the stomach and intestines. An important point is, that it can be given in conjunction with true antiseptics, such as salol, when necessary, without its digestive action being checked; even corrosive sublimate in diluted solutions does not interfere with its digestive powers. It acts at all temperatures, but attains its maximum activity at a temperature of about 130°F. In several important points it differs from pepsin. Papoid acts best in an alkaline solution, but also can work in fluids with an acid or neutral reaction; pepsin requires an acid solution. Papoid is freely soluble and is most active when in concentrated form; pepsin requires free dilution. Herschell also points out the greater digestive power possessed by papoid than either pepsin or pancreatine, and states that "it can be used when pepsin is contra-indicated or powerless." Finally, it should be stated that papoid has no action upon living tissues, and is positively innocuous when swallowed in any quantity that is likely to be administered.

Therapeutically, confining these remarks strictly to digestive disorders, papoid is useful when digestion has been overtaxed, or when the secretion of gastric juice is absent or deficient. Experiments of my own and others have satisfied my mind of the remarkable digestive activity of papoid. For instance, in one of the experiments referred to, portions of the constituents of a hearty dinner of bread, meat, potatoes, peas, mince pie, and other substantial were placed in a large test-tube and treated with papoid and bicarbonate of sodium and a small amount of water. The result was very satisfactory indeed; the meat rapidly softened and the other ingredients gradually disintegrated, forming a pultaceous mass which finally separated into a grumous sediment and an overlying albuminous, dark-coloured liquid.

Since papoid acts in alkaline solutions even better than in acid media, it is evident that it is specially useful where there is indigestion due to deficient secretion of gastric juice or of hydrochloric acid (achlorhydria). In such cases, the administration of an alkaline solution of papoid favours gastric digestion both directly and indirectly—first, by digesting albuminates and softening masses of food; and, secondly, by the

action of the papoid in stimulating the secretion of the pepsin gland, while the alkali induces the secretion of a more acid gastric juice. Moreover, it retards the fermentation of the undigested masses of food in the stomach and prepares them for intestinal digestion. In fact, in such cases a



ILLUSTRATING ARTICLE BY PROF. WOODBURY ON
PAPOID.

compressed pill of papoid, bicarbonate of sodium, and extract of nux vomica has given me excellent results. In the contrary case, where there is an excess of hydrochloric acid, and where the stomach contents poured into the duodenum are so acid