

" *Glycerin* is a faintly yellow liquid, with an agreeable sweet taste,—it attracts water from the air, dissolves readily in water and alcohol, but not in ether, and is neutral. It dissolves alkalis and several of the metallic oxids, as oxid of lead in large quantity. When rapidly heated it is entirely decomposed. If its watery solution be exposed to evaporation, decomposition immediately ensues. When heated in the air it becomes inflammable and burns with a blue flame. By concentrated nitric acid it is converted into carbonic acid, oxalic acid and water; with hydrochloric acid and peroxid of manganese it originates formic acid. The best test for it is that when heated with anhydrous phosphoric acid in a tube from which fresh air is excluded, it yields acrolein," which is known by having a peculiar and a very disagreeable odor, not unlike that developed by the wick of an expiring oil lamp.

" *Stearin* or stearate of the oxid of lypyl occurs as a pure white substance; it separates on cooling from its alcoholic solution in snow white glistening scales, which under the microscope appear chiefly as quadrangular tablets, sometimes as short rhombic prisms."

" *Margarin* is a white solid. It crystallizes from alcohol as a flocculent white powder, which under the microscope appears in the form of very delicate and often curved needles, arranged in rays or in whorls."

" *Olein*. This is a colorless oil which solidifies at a low temperature, it turns rancid on exposure to the air. It is never obtained entirely free from stearin or margarin."

DIGESTION.—It is conceded by every observer that fats are digested in the duodenum. They are not normally acted upon in the stomach, so that after remaining for a time in this organ they pass unaltered into the duodenum. The only exceptions are that when adipose tissue is taken into the stomach, the areolar membrane connecting the vesicles as well as the simple membrane which encloses the vesicles are dissolved by the animal heat and gastric juice, and the fat is liberated so as to become diffused in a fluid form; the membranes thus fused are, however, albuminous textures, so that probably this is not truly an exception, for the fat is not acted upon till after it has got clear of the pylorus into the duodenum. The next exception is seen under certain disordered states of the stomach, there being then a great proneness in the fats to evolve fatty acids while in the stomach, such as occur during ordinary rancidity. These acids are exceedingly acrid and irritating. Thus mutton fat develops hircic acid; train oil, phocenic acid; and butter, no less than three, butyric, capric, and caproic acids. In healthy digestion the presence of bile is essentially necessary to ensure the assimilation of fat. Bile is necessary chiefly to promote the absorption of the oil globules through the intestinal