this case being intracellular. 5. This secretion is probably not acid. It cannot apparently act on cellulose walls, but *diffusing* through the coats of cellulose clothing organisms, acts on the contained protoplasm. There is thus some evidence for the view that Rhizopods normally derive fat and carbohydrate from the splitting up of solid proteid—in which they would resemble the highest mammals. They can also probably utilise matter already in solution. 6. The formation of the digestive secretion is not stimulated by bodies incapable of digestion or unsuitable for nourishment. 7. At a certain stage of digestion, there may be temporary loss of fluid around the food; later, the *vacuole of ejection* succeeds the digestive vacuole; and by the outward opening of this vacuole all remains of former food are expelled from the body (excretion). The crystals found in Amœba Proteus and the *contractile* vacuole seem to have no direct connection with digestion. After the ingestion of food, the "proper" granules gather around it; this may have a digestive significance, but such cannot be positively asserted. Observation of the behaviour of these two forms in relation to the digestive process have led to the belief that there are *differences* of a non-essential character.—*Jour. of Physiology*, Eng.

THE LIVER FERMENT.—Miss Florence Eves, B.Sc., of Newnham College, has published a research bearing on this question: Is there a liver ferment which converts glycogen into sugar or not? An affirmative answer to this question has been given since the time of Bernard, but the existence of such ferment was rather an assumption than a demonstrated fact. Miss Eves treated the livers of various animals, especially of the sheep, according to approved methods, with a view of extracting a ferment. The results of her work may be summarised about as follows:—1. There is evidence of the existence of an amylolytic ferment in the (dead) liver, but the amount is very small; a portion of this may be fairly assumed to have been derived from the blood remaining in the unwashed liver, since an amylolytic ferment can be extracted from blood. 2. The sugar formed *post-mortem* in the liver is true dextrose, as had been previously shown. 3. The sugar formed by the isolated liver-ferment is *not* dextrose. It is of smaller reducing power, and may be possibly maltose. It seems natural, therefore, to conclude that the *post-mortem* conversion in the liver is *not* due to ferment action. The *rapid* appearance of sugar in the liver after death is rather to be attributed to the "specific metabolic activity of the dying cells." The same cause suffices to explain the more gradual production. This conclusion would relieve physiology of at least one ferment, and it must be confessed that ferment action seems to be bearing a large share—an undue share in the physiological explanations of the day.—*Jour. of Physiology*, Eng.