

Not infrequently it assumes more or less grotesque shapes, in which almost every conceivable likeness may be imagined.

Usually *Amoeba proteus* creeps along surfaces, mainly extending its pseudopods, and advancing in the same general direction. The pseudopods may, however, be extended or produced in any direction, and in their production the direction of motion of the animal may be completely reversed, or it may occur in the direction of extension or production of any pseudopod. There is no fixed distinction or differentiation of parts or regions, and any point of the animal may become central or peripheral, forward or backward, or lateral.

In the movements of *Amoeba proteus*, as certain of the pseudopods are extended, and the mass of the body is proportionately reduced, other pseudopods may more or less gradually recede and merge into the advancing ones, or they may become shriveled and mammillary in appearance, as is frequently the case with the posterior extremity of the body itself, and as represented in figs. 3-7, pl. I.

The mammillary appearance assumed by the posterior extremity of the animal may persist for a considerable time, though undergoing continued variation. Any of its processes may become the source of new pseudopods, and the whole may, at any moment, contract and merge into the general mass of the body.

When *Amoeba proteus* is free and floating or suspended in water, it often assumes a more or less radiate or stellate appearance, with the pseudopods more or less tapering, and it then looks like a giant form of *Amoeba radiosa*, as represented in fig. 2, pl. II.

When creeping on flat surfaces, the body and pseudopods of the *Amoeba* are more or less depressed; but when the animal is floating, they are more rounded.

The ordinary shape of the pseudopods is digitate or finger-like, or depressed cylindroid, with blunt rounded ends. They may be straight or more or less curved, even or crimped, and simple or branched. Sometimes they are more or less tapering and bluntly pointed, or they may be clavate, or thicken in approaching the end.

The projection of the pseudopods is always preceded by a flow of the more hyaline portion of the protoplasm of the body, or of the ectosarc, followed closely and incessantly by an influx of the endosarc. The flow