

of the endosarc proceeds from the interior of the body, and is continuous through the axis of the latter, back of the source of the pseudopod; and if this forms the fore part of the body, the current may be continuous its entire length. If a growing pseudopod proceeds from an intermediate position, currents of endosarc may flow from opposite directions to promote its extension.

The flow in the current of endosarc is always most active axially, both within the body and the pseudopods. As it approaches the end of a pseudopod, formed by the advancing ectosarc, it usually enters to one side and turns upon itself, as represented in fig. 11, pl. II.

New pseudopods start more or less abruptly, and give one the impression as if they proceeded from a sudden escape of a portion of the contents of the body, through an accidental rupture of its surface. In their extension they appear to flow onward like a liquid stream, as previously intimated, always preceded by a portion of the clear ectosarc, followed by an incessant influx of the endosarc. In the precedence of the ectosarc, it looks as if it were a clear liquid, incessantly drained from the endosarc, and flowing off in a stream; but apparently before the ectosarc has a chance of accumulating to any considerable extent, it is constantly followed by granular endosarc, as if this was forced into it from behind by contraction of the body.

The progress of the animal may continue steadily for a time, induced by the equally steady extension and advance of one or more pseudopods, accompanied with a more or less brisk flow of the endosarc of the body, continuing in one stream, or dividing into several, according to the number of the advancing pseudopods.

While there is no absolute distinction between the ectosarc and endosarc, the two being continuations of the same protoplasmic mass, in the movements of the animal the endosarc appears to flow within walls, more or less thick, formed by the ectosarc. With the exhaustion of the endosarc from behind, the including ectosarc contracts, and melts away into the advancing portion of the body.

*Amæba proteus*, while steadily pursuing its course, may slacken its speed and altogether cease its onward movement; and after a brief interval, a new pseudopod may start forth, and with its extension in the same direction the course of the animal may be entirely changed from the former one.