hæmatoxylin these cysts had both the cytoplasmic and nuclear structure of the cysts of this parasitic amœba discharged in the stool.

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On the culture in vitro of Councilmania lafleuri and Endamoeba coli.

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During the past year cultures have been made by us from fifty stools from eight cases of infection by intestinal amœbae. Three of these had *Endamoeba coli* and *Councilmania lafleuri,* three had *C. lafleuri,* and two had *E. coli.* Upon culture of stools from the first group both species of amœba appeared in the cultures from two of the three cases. Of the third only one attempt with 6 tubes was made. Not infrequently attempts at culture on any case will fail from some stools. In the second group containing infections of *C. lafleuri,* this species only was obtained in cultures. In the third group containing *E. coli* this was obtained in culture from one of the two cases. One stool only, however, was used from each case.

Cultures have been made from 49 stools. All cases cultured had infections of *Blastocystis.* This organism invariably overgrows cultures of amœba sooner or later, generally within four to six days in Boeck's media. Transplants of *C. lafleuri* must be made every twenty-four to forty-eight hours. If, however, the dextrose is omitted, cultures have survived with transplantation for fourteen days, and in one instance only motile amœbae survived in the same tube for twelve days. In Locke's solution with 0.5 per cent defibrinated rat's blood plus 1:60500 acroflavine transferred cultures were continued for twenty-one and twenty-eight days in two instances. In case of *E. coli* no culture could be continued beyond seven days in any of the media. It is much more susceptible than *C. lafleuri* and is always much less abundant than that species in both the stools and the cultures.

In a peptone medium made from Lilly's liquid peptone reduced one half by evaporation, and removal of the alcohol, plus 0.5 per cent sodium chloride, with and without egg slant, only *C. lafleuri* grew, though *E. coli* was also present in the stool.

On the electric warm stage, cultures will show *E. coli* and *C. lafleuri,* in motile activity, occasionally in the same field. The differences between the two in appearance and behavior in this medium are evident and are identical in their main features with those of the same amœbae in motile phases from warm stools. *E. coli* has a sluggish behavior, rolling along leisurely. Clear pseudopodia have never been seen by us in *E. coli.* As it progresses pseudopodial extensions are immediately granular in structure. They are also somewhat conical in contour. *C. lafleuri* on the other hand moves rapidly when in locomotion. Its pseudopodia are thrown out with explosive suddenness and are invariably extremely clear and hyaline. Their contour is broadly rounded, varying with the degree of acidity. The pseudopodia gel quickly and often persist unchanged for a brief time. Granular pseudopodia have never been seen by us in *C. lafleuri.*

The color of the two amœbae *in vivo* is characteristically different. *E. coli* has a bluish gray tinge and a more finely granular structure. *C. lafleuri* is pale yellowish green and more coarsely alveolar.

The *E. coli* with clear pseudopodia which Thomson and Robertson[1] recovered in culture from stools is undoubtedly not *E. coli.* It may be *C. lafleuri.*

[1] Thomson, J. G., and Robertson, Andrew, *J. Trop. Med. Hyg.,* 1925, xxviii, 345-349.