The trypanosomes which have been met with by various investigators in the stomachs of Tsetse-flies, lice, leeches, etc. are distinctly "cultural forms" since they show the blepharoplast in a position anterior to the nucleus. This fact indicates that all such forms can be cultivated in the test-tube. The *Herpetomonas* forms found in flies and mosquitoes are true cultural trypanosomes, and, without doubt, future studies will reveal the blood parasite from which they are derived. The *Chrithidia* show no undulating membrane, in the ordinary truncated form, and on account of their peculiarity, for the present at least, are to be considered as representing a distinct genus.

ISOLATION OF TRYPANOSOMES FROM ACCOMPANYING BACTERIA.

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In general, it may be said that bacteria once introduced into a culture of trypanosomes tend to outgrow and check the development of the flagellates. In exceptional instances, however, the bacteria thus introduced exert little or no interference and may be even apparently beneficial. While in the former case the trypanosomes soon die out, in the latter instance the mixed cultures may be kept for six months or longer.

The isolation of the trypanosomes in pure form from such mixed cultures is a matter of some importance, especially when it is desired to study the pathogenic action of the flagellates. The need for some method of separation was particularly felt in connection with the study of the mosquito trypanosomes which, since they are present in the intestinal canal, are always accompanied by various bacteria and yeasts. After many ineffectual attempts the following method was successfully employed for the isolation of pure cultures of *Herpetomonas* and *Chrithidia*.

By means of a small glass spatula, made by drawing out the end of a glass rod, a little of the mixed culture was spread in a series of streaks over six Petri dishes containing solidified blood agar. The Petri dish known as the "Kriegsministeriums-Modell," made by Greiner and Friedrichs, is particularly adapted for this purpose inasmuch as it can be sealed effectually by means of a wide rubber band. The sealed dishes are then set aside at room temperature for 10 to 12 days. The last plate or two of the series will be found to show isolated colonies of trypanosomes which can then be transplanted in the usual way to the test-tube. This method will undoubtedly be found useful in future studies of the flagellates found in the intestinal canal of insects and other sanguivora. The intestinal contents can be spread directly over the plates in the manner indicated.