disappearance of the exudate is a fairly well chosen term, it is sometimes too long for the safety of the patient, and often not long enough to prevent infection being carried by those who are discharged. Park and Beebe think that the isolation of patients should continue until cultures prove the absence of bacilli, and when such examinations cannot be made, at least three weeks should elapse after the disappearance of the membrane. During the past two months, as confidence has been established in bacteriological results, considerable advantage has been taken of such tests, as governing the discharge of patients, and, in no instance, has there been any reason to doubt the correctness of the conclusions.

Diagnosis by Examination of the Exudate.—The question is often asked whether, by a microscopical examination of a smear of the exudate, it is possible to make a diagnosis. In many cases a reliable conclusion can thus be formed, but, in others, it is quite impossible. Failure may arise from the fact that the bacilli are few, while other organisms are very numerous, and, as I have before stated, the characters of the Lœffler bacillus are, in the natural medium, often very difficult of recognition.

On looking over the records of the last hundred exudates examined I find that the bacillus was noted as being undoubtedly present 36 times, and as being probably present 39 times. In the other cases the organism was either not present, or unrecognizable. According to this it is possible to make, from the exudate, a sure diagnosis, in at least one-third of the cases, and to form a fairly correct idea as to the nature of about three-quarters. Negative results have not any diagnostic value, as failure to detect the bacilli does not necessarily prove their absence.

Number of Species of Bacteria Found in Cultures.—Considering the apparently fertile source it is quite remarkable that so few species are found in serum cultures. Miller isolated more than 100 species from the juices and deposits of the mouth, and it does not seem unlikely that a large proportion of these might reach the tonsils or pharynx. The greater number of such bacteria are derived from food, or air, and the mouth organisms proper, were found by Miller to be strictly parasitic, and not capable of cultivation on artificial media. This may possibly account for the small number of species represented by cultures from the throats of diphtheria patients, and the temperature at which cultures are grown no doubt exercises an inhibitory influence on many species. I have found that the range is confined to about 20 organisms, and the occurrence of some of these is quite rare. The species include Lœffler's bacillus, and pseudo form, the pyogenic staphylococci and streptococci, micrococcus tetragenus, white and pink yeasts, the diplococci of Frankel, and Friedlander, Pfeiffer's bacillus, streptococcus articulorum, bacillus mesentericus vulgatus, and other spore-bearing organisms.

Character of Pathogenic Organisms Found.—The following table shows the general character of the organisms present in 188 hospital cases, and 60 in private practice. The results are calculated in the nearest whole percentages :

	Hospital Cases.	Private Cases.
B. Diphtheriæ	36 per cent.	21 per cent.
" and streptococci.	11 " "	18 " "
" and staphylococci	10 " "	6 " "
" with strepto. and staph	19 " "	15 " "
Streptococci only	4 " "	16 " "
Staphylococci only	6 " "	7 " "
Strepto. and staphylo.	12 " "	14 " "
Other organisms	2 " "	2 " "
Lœffler's bacillus present	75.5 " "	61.7 " "
" " absent	24.5 " "	38.3 " "

It is commonly supposed that Lœffler's bacillus is much more generally associated with cocci than is indicated by this table, but I can only give the facts as observed. It may, however, be explained that the cases of combination are understated, on account of the somewhat slower growth of cocci on serum, and it may also be said that the above figures refer only to cocci other than M. tetragenus. Observations of the cultures were, in all cases, made after 24 hours development, except those set on Saturdays, when twice this time elapsed. Cocci were found to grow in the shorter period, and there is no definite reason to conclude that a longer time in the incubator would have produced a different result.

The fact that nearly one-quarter of the cases admitted to the Isolation Hospital as diphtheria, were really not so, is a most important one, and points strongly to the necessity for "suspect" wards in institutions of this character. The isola-