formation was described as not being typical but usually thick and pultaceous, and in some cases no distinct membrane was formed.

In one such case, the rather large organism met with grew on potatoes as a distinct white colony, excluding it from the category of Klebs-Lœffler bacilli. It killed guinea pigs by septicæmia without the characteristic hæmorrhagic infiltration of the diphtheria bacilli.

In the case of genuine diphtheria bacilli, a certain proportion of the rods stain intensely, almost black, with warm carbol fuchsin. In the case of the pseudo-forms this was not the case, the staining being more uniform and much fainter.

In another case an organism forming long rods was obtained in pure culture and killed guinea pigs in the typical manner with the characteristic lesions.

In a third case, without any diphtheritic membrane, an organism was met with which was twice as long and thicker than the Klebs-Lœffler bacillus in the first culture, but on making sub-cultures in successive generations became typical, and later on showed typical growth from secondary throat cultures.

This tendency of bacilli, when in considerable amount in the first cultures, to revert to the well-known Klebs-Lœffler type in sub-cultures and their tendency to show virulence to guinea pigs, has made it hard to decide that any bacillus is not Klebs-Lœffler bacillus if it is found in abundance in a primary culture, no matter how far it may be removed from the orthodox standard morphologically.

The most satisfactory mode of procedure is, of course, the inoculation of guinea pigs, but to do this properly involves delay. In the first place, the original throat cultures are nearly always too thickly sown to allow of the immediate isolation of pure cultures without preliminary separation upon surface of serum tubes, which means usually a delay of a day. When a pure culture is obtained conclusive results can only be assured by inoculation of a bouillon culture, which means a delay of one or two days more. Finally, if the full degree of virulence is not present, the animal may take two or three days to die. In any case, as pointed out by Roux and Yersin and by Park, the fact that one colony grown from a sample is not virulent, does not show that another of the same bacillus from the same case may not be, as the virulence of different colonies, even in the same case, has been shown to vary greatly. The formation of acid or alkali can be more readily determined, but also requires isolation of pure cultures in order to be used.

The delay and trouble attendant on this test by inoculation contrasts very unfavourably with the convenience and rapidity of the rest of the technique for quarantine purposes. I have obtained more satis-